

Syllabus

PHIL1150

Introduction to Logic and Critical Thinking

2012

Committee Members:

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Date Reviewed: 7 Feb 2012

NCCA Council of Instructional Officers Chair

Dr. Dennis Headrick, Southeast Community College

Date Approved: 3/16/12

I. CATALOG DESCRIPTION

PHIL1150

Introduction to Logic and Critical Thinking

Prerequisite: Reading/writing skills at ENGL 1010 level or instructor's permission.

An introduction to the study of arguments and reasoning, with an emphasis on the principles of formal reasoning and their application. PHIL 1150 will examine the objective analysis and evaluation of arguments and ways of improving critical thinking skills. Students will gain proficiency with systems of formal reasoning and construct sound arguments based on relevant evidence.

3.0 semester credit hours; 4.5 quarter credit hours; 45 contact hours

II. COURSE OBJECTIVES: *The course will:*

1. Provide students with tools for objectively analyzing and evaluating ordinary informal arguments.
2. Classify fallacious forms of reasoning and identify what is wrong with those fallacies.
3. Examine the logical structure of arguments, and present the concepts necessary to determine their reasonableness.
4. Introduce students to systems of formal reasoning and their applications to the study of reasoning and arguments.
5. Explore the relevance and applicability of systems of formal reasoning to the analysis of ordinary informal arguments and to improved critical thinking.
6. Enhance student proficiency in solving problems and drawing inferences using formal methods.

III. STUDENT LEARNING OUTCOMES: *Students will be able to:*

1. Analyze ordinary informal arguments and determine their logical form and important features such as validity or soundness.
2. Identify the main kinds of fallacious reasoning and detect these fallacies in ordinary informal arguments.
3. Draw valid inferences using a formal system of reasoning.
4. Assess the reasonableness of inferences using formal methods.

5. Apply formal methods to determine the logical features of statements or groups of statements, such as whether a statement is a tautology or two statements are logically equivalent.
6. Make an informed judgment about the applicability and relevance of formal logical methods to analyzing informal reasoning and to improved critical thinking skills.

IV. CONTENT/TOPICAL OUTLINE (Chronology may vary):

1. Arguments and their characteristics
2. Fallacies
3. Analyzing ordinary informal arguments
4. Categorical (Aristotelian) logic and Venn diagrams
5. Propositional logic: truth tables
6. Propositional logic: natural deduction
7. Constructing arguments

V. INSTRUCTIONAL MATERIALS

1. Suggested Texts
 - a. Critical Thinking by Brooke Noel Moore and Richard Parker, latest edition
 - b. A Concise Introduction to Logic by Patrick Hurley, latest edition
 - c. Elements of Reasoning by David Conway and Ronald Munson, latest edition.
 - d. Logic and Philosophy: A Modern Introduction by Paul Tidman and Howard Kahane, latest edition
 - e. Introduction to Logic by Copi, Cohen, and McMahon, latest edition
2. Supplemental handouts; video materials, etc., to be supplied by the instructor.
3. Outside reading/research as determined by instructor.

VI. METHODS OF PRESENTATION

Instructors should make use of varied pedagogical techniques including several of the following: lectures, small and large discussion groups, individual and/or collaborative projects, debates, research, peer response, journals, essays, conferences, computer-assisted instruction, interactive/creative methods, multi-media, and field trips.

VII. METHODS OF EVALUATION

As determined by the instructor, course grades will be based on class and group participation, daily work, exams, presentations, projects, papers and/or a portfolio. The instructor will distribute and discuss evaluation and grading policies with students at the beginning of each term.

VIII. INSTITUTIONAL DEFINED SECTION

(To be used at the discretion of each community college as deemed necessary)